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ABSTRACT

Reported in this document are the results of three experiments investigating the potential influence of peers in gender-role socialization. Children were exposed to a series of vignettes providing information about target children who varied in their degree of masculinity and femininity. Drawn from third through sixth grades, participants included 71 boys and 90 girls in the first study, 102 boys and 137 girls in the second study. In these two experiments, subjects rated their interest in being friends with the target child, how happy they thought the child was, and their interest in emulating the child's behavior. In the first study, the target child was male; in the second, female. A total of 33 boys and 33 girls in kindergarten, first grade, and second grade participated in the third experiment, which incorporated an age-appropriate assessment technique involving nonverbal responses. On the whole, results for the first two experiments indicated that variations in sex-typed behavior influence friendship ratings by same-age peers, with boys' ratings being more profoundly affected than girls' ratings. Both studies also demonstrated that children are sensitive to degrees of "gender-role deviance." Surprisingly, friendship ratings made by boys in the third experiment differed notably from ratings made by boys in the first. (Implications of the findings are discussed.) (RH)

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Children's Appraisals of Sex-Typed Behavior in Their Peers

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Children's Appraisals of Sex-Typed Behavior in Their Peers

The role of peers in the socialization process has become a mainstream topic in child development research (viz., Hartup, 1983). In the present study, we report the results of three experiments designed to examine the potential influence of peers in gender role socialization. Children were exposed to a series of vignettes that provided information about children who varied in their degree of masculinity and femininity. The children then made ratings regarding their interest in being friends with the target child, how happy they thought the child was, and their interest in emulating the child's behavior. Thus, the focus of the research was on affective or evaluative reactions, with the notion being that such responses probably play the most important part in peer regulation of gender role behavior.

Peer appraisals of variations in sex-typed behavior may be considered part of a more general literature on social cognition that has examined children's understanding of, and reactions to, a variety of socially deviant behavior (e.g., Cowen, Pederson, Babigian, Izzo, & Trost, 1973; Deluty, 1983; Marsden & Kalter, 1976; Marsden, Kalter, Plunkett, & Barr-Grossman, 1977; Novak, 1974; Roberts, Beidleman, & Wortele, 1981; Roberts, Johnson, & Beidleman, 1984; Whalen, Henker, Dotemoto, & Hinshaw, 1983; see also Campbell, 1975; Chassin & Coughlin, 1983; Coie & Pennington, 1976; Kalter & Marsden, 1977; Maas, Marecek, & Travers, 1978). The bulk of these

studies demonstrate that children are capable of identifying "emotionally disturbed" behavior from normal behavior in their peers; in addition, there is some evidence that children can differentiate between different types of emotional disturbance, which presumably vary along dimensions (e.g., severity) that have important psychosocial implications. The ability to make such distinctions influences a variety of social judgments, including the degree to which the target child is liked or disliked. This body of data clearly suggests that children, at least from around the age of 8 (none of the above-cited studies have included younger subjects), are quite sensitive to the expression of socially deviant behavior.

The etiology of gender role behavior remains a hotly debated matter. The role of peers in the genesis of sex dimorphic behavior has been less well studied than in its subsequent maintenance. With regard to the latter, the literature to date forms a reasonably coherent pattern. Naturalistic studies of preschoolers (e.g., Fagot, 1977) generally show that they are more likely to praise same-sex behavior than cross-sex behavior in their peers; in addition, boys are more likely than girls to be criticized when engaged in cross-gender behavior. Moreover, such reactions appear to have at least short-term influence on children's subsequent gender role behavior (e.g., Lamb & Roopnarine, 1979). Analogue studies with older children yield similar findings--peers generally have more favorable opinions of children who

engage in sex-typical behavior (e.g., Carter & McCloskey, 1984; Hemmer & Kleiber, 1981), a pattern that tends to be more pronounced for boys than for girls. A review of this literature may be found elsewhere (Zucker, 1985, pp. 96-102).

The present series of experiments extends this body of literature in a number of ways. First, we attempted to evaluate childrens' reactions to patterns of gender role behavior, rather than studying single behaviors in isolation (cf. Gray, 1957). Second, our choice of gender role behaviors was based on clinical experience, which suggested that they had ecological validity (cf. Huston, 1984). Third, we hoped to assess childrens' sensitivity to variations in the degree of deviance within one content area (i.e., gender role), in contrast to other studies that have assessed sensitivity to variations in the degree of deviance between content areas (e.g., Marsden & Kalter, 1976). Finally, we attempted to evaluate peer reactions over a broad age range, which, as will be seen, required the use of different assessment techniques.

Experiment 1

Method

Subjects

A total of 71 boys and 90 girls in grades 3-6 participated in the study. Children attended one of three public schools in a suburb of Toronto. Parent permission forms were distributed to a total of 354 children; of these,

161 parents (45.4%) gave approval for their child to participate in the study. The majority of the remaining children did not return the parent permission form.

Task and Procedure

Each child read five stories about a same-age boy in which the ratio of masculine to feminine behaviors varied: 4:0, 3:1, 2:2, 1:3, and 0:4. The four sex-typed behaviors were peer preference (play with boys or girls), dress-up preference (Dad's old army shirt and belt or Mom's old dress and high-heeled shoes), fantasy hero (Superman or Wonder Woman), and toy preference (racing car or Barbie doll). These behaviors were chosen for two reasons: first, they have been noted to represent the "core of sex typing" (Huston, 1984), at least during early childhood; second, practical experience suggested that such (cross-sex) behaviors, when expressed together, are characteristics of cross-gender-identified children (Green, 1974; Zucker, 1982), and thus appear to have "clinical" ecological validity. An example of a story is as follows:

> This is a story about a boy named Peter. He is in grade [ ], just like you. At recess, Peter plays with the girls. After school, Peter goes home and does his favorite thing--he puts on one of his Mom's old dresses and high-heeled shoes. After supper, Peter watches the TV show he likes best, Wonder Woman. Right before bedtime, Peter plays with his favorite toy, a Barbie doll.

For the story with two masculine and two feminine behaviors, it was mathematically possible to create six different combinations of these behaviors. Four combinations, or exemplars, of masculine and feminine

behaviors were chosen, in order to meet the overall design requirements of the study (see below). The use of multiple exemplars enables one to more readily determine whether idiosyncratic stimulus characteristics were operative. The stories were presented in one of eight possible orders, which were selected at random. Each story and the questions that followed it were presented on different colors of paper. None of the given names in the five stories corresponded to the given names of children in the participating classrooms.

Children were tested in groups in an empty classroom by a female experimenter. Prior to reading the stories, the children were told that they were going to be given some stories to read and that they were then going to be asked some questions about the stories. The children were also told that each story was different and was on a different color of paper and that everyone had the same stories, but that they were in different orders.

After each story, there were seven questions. The first four questions were included to check that the children had accurately read the story. Each question involved one of the four sex-typed behaviors and the child had to indicate which behavior had been engaged in (e.g., Who did Peter play with at recess--the boys or the girls?). Each question was presented in a forced-choice format. The remaining three questions constituted the dependent variables in the study. (1) If you knew (name of child), how much would you like to be his friend? (2) How happy do you think (name of child) is?

(3) How much would you like to do what (name of child) did in the story? Each question was answered in a five-point multiple choice format (e.g., "yes, a real good friend" to "no, not at all"). The children were informed that the first four questions had a "right" answer, but the last three questions did not; for these questions, the children were told that "we just want to know what you think, how you feel."

To summarize, the design involved three between subject factors (sex of child, grade, and exemplar) and one within subject factor (story-type). The aim was to have 8 children in each cell, with each child being exposed to the five stories in a different order, thus totalling 256 subjects. Unfortunately, the number of children allowed to particpate resulted in only about 5 children per cell.

Results

Inspection of the responses to the manipulation check questions indicated that 147 children (91.3%) answered all 20 questions (four per story) correctly, 13 children answered all but one question correctly, and 1 child answered six questions incorrectly. Only the data for this last child were discarded. Three children failed to provide an answer for at least one of the stories for the happiness question, and eight children failed to provide an answer for at least one of the stories for the imitation question.

Preliminary analyses indicated that grade (with the exception of the friendship question) and exemplar did not

contribute significantly to the results, so the data were collapsed across these two between subject factors.

Friendship.--The childrens' friendship ratings as a function of sex of child and story-type may be found in Table 1. A 2 (sex of child) x 4 (grade) x 5 (story-type) analysis of variance (ANOVA) revealed a sex x story-type interaction ($F[4,608]=40.44$, $p < .0001$) and a grade x story-type interaction, $F(12,608)=1.88$, $p = .0338$. The latter interaction was not evaluated further, as it did not yield relevant information for the questions under study.

Simple effects analysis (Kirk, 1968) for the sex x story-type interaction yielded the following findings. For the boys, the exclusively masculine boy was preferred most as a friend. With each addition of a feminine behavior, the friendship ratings became increasingly negative (all ps .05). The boys' ratings fell on the negative side of the indifferent midpoint ("I wouldn't really care one way or the other") once the target child manifested more feminine than masculine behaviors.

For the girls, the exclusively feminine boy was preferred most as a friend. In general, the girls' ratings became increasingly negative as the number of masculine behaviors increased, though the only significant difference was between the ratings for the exclusively feminine and exclusively masculine boy ($p < .05$). Across all stories, the girls' ratings fell on the positive side of the indifferent midpoint.

Additional analyses showed that the boys were more interested than the girls in being friends with the exclusively masculine and primarily masculine boy (both ps .0001) whereas the girls were more interested than the boys in being friends with the exclusively feminine and primarily feminine boy (both ps < .01). The sexes did not differ in their friendship ratings for the boy who engaged in equal numbers of masculine and feminine behaviors.

Happiness.--A 2 (sex of child) x 5 (story-type) ANOVA revealed a main effect for story-type, $F(4,620)=6.48$, p .0001 (Table 1). A Newman-Keuls test indicated that the exclusively masculine boy was considered happier than the boys who engaged in two or more feminine behaviors (all ps .05). The primarily masculine boy was considered happier than the primarily feminine boy ($p < .05$). None of the other comparisons were significant. In general, the children appeared to judge the target children as being happy "most of the time."

Imitation.--A 2 (sex of child) x 5 (story-type) ANOVA revealed a sex x story-type interaction, $F(4,600)= 53.07$, $p < .0001$ (Table 1). Simple effects analysis showed that the boys were most interested in emulating the behavior of the exclusively masculine boy. With each addition of a feminine behavior, the ratings became more negative; in fact, the only rating that fell on the positive side of the indifferent midpoint was for the exclusively masculine boy. Three of the four adjacent means differed significantly from each other

(all $ps < .05$).

The girls were most interested in emulating the behavior of the exclusively feminine boy. With each addition of a masculine behavior, the ratings became more negative. Interest in imitating the behavior of both the exclusively feminine and primarily feminine boy was significantly greater than that of the other three boys (all $\underline{p}s < .05$). Only the imitation ratings for the primarily masculine and exclusively masculine boys fell on the negative side of the indifferent midpoint.

Additional analyses showed that the boys were more interested than the girls in emulating the behavior of the exclusively masculine boy ($\underline{p} < .0001$) and less interested in emulating the behaviors of the boys with two or more feminine behaviors (all $\underline{p}s \leq .002$).

Discussion

The boys' friendship ratings indicated a sharp sensitivity to the target child's pattern of sex-typed behavior. As might be expected, the exclusively masculine boy was preferred most as a friend and the exclusively feminine boy was preferred least. Of greater interest, perhaps, was the sensitivity to the variations in sex-typed behavior between these two extremes. Even one feminine behavior in conjunction with three masculine behaviors resulted in a less positive friendship rating, and as the number of feminine behaviors increased, the ratings became less and less favorable.

The girls' friendship ratings yielded a reversed pattern, though one that was less pronounced. The exclusively feminine boy was preferred most as a friend and the exclusively masculine boy was preferred least; however, all ratings fell on the positive side of the indifferent midpoint. In general, the girls appeared to be only slightly interested in being friends with the target child, regardless of his pattern of sex-typed behavior. In contrast, the boys clearly showed a strong interest in being friends with the target child, providing that his behavior was either exclusively or primarily masculine.

The happiness ratings did not yield differences as pronounced as the friendship ratings although there was some indication that the target child was considered less happy as the number of feminine behaviors increased. However, the modal rating was that the target child was happy "most of the time," regardless of his pattern of sex-typed behavior. Correlational analyses indicated no relation between the friendship and happiness ratings; it thus appears that the children did not consider that their interest in being friends with the target child would have a strong impact on his emotional state.

The imitation ratings yielded results quite similar to the friendship ratings--the boys were most interested in emulating the behavior of the exclusively masculine boy whereas the girls were most interested in emulating the behavior of the exclusively feminine boy. Both sexes showed

less and less interest in imitating the target child as the number of cross-gender behaviors increased. Thus, these data appear to lend some validity to the sex-typed behaviors as indices of preference.

The absence of a grade effect interacting with sex of child and story-type suggests that the evaluative rating of friendship is developmentally stable across the age period studied. A similar conclusion is warranted for the imitation ratings. The absence of an exemplar effect provides some evidence that the results obtained were not due to idiosyncratic combinations of masculine and feminine behaviors, providing some support for the generality of the findings, at least with regard to the type of sex-typed behaviors that were used.

On the whole, then, the methodology of this analogue experiment appears to show promise in eliciting meaningful information regarding childrens' appraisals of variations in sex-typed behavior in their peers. The next experiment employed the same methodology, except this time the target children were girls.

Experiment 2

Method

Subjects

A total of 102 boys and 137 girls in grades 3-6 participated in the study. Children attended one of three public schools in a suburb of Toronto. The percentage of parents allowing their child to participate was similar to

that obtained in Experiment 1.

Task and Procedure

The task and procedure were identical to that of Experiment 1, except this time the five stories were about a same-age girl.

Results

Inspection of the responses to the manipulation check questions indicated that 209 children (87.4%) answered all 20 questions (four per story) correctly, 25 children answered all but one question correctly, and 5 children answered two or more questions incorrectly. Data for these five children were discarded. Five children failed to provide an answer for at least one of the stories for the friendship and happiness questions, and nine children failed to provide an answer for at least one of the stories for the imitation question.

Preliminary analyses indicated that exemplar did not contribute significantly to the results, so the data were collapsed across this between subject factor. Grade was retained as a between subject factor for the friendship and imitation questions.

Friendship.--The children's friendship ratings as a function of sex of child and story-type may be found in Table 2. A 2 (sex of child) x 4 (grade) x 5 (story-type) ANOVA revealed a main effect for grade ($F[3,221]=5.62$, $p = .001$) and a sex x story-type interaction, $F(4,884)=14.95$, p .0001. Duncan's multiple range test for unequal ns (Kramer,

1956) showed that the grade 3 children had more positive friendship ratings (mean, 2.21) than the children in grades 4 (mean, 2.68), 5 (mean, 2.96), and 6 (mean, 2.87), respectively (all ps < .05).

Simple effects analysis for the sex x story-type interaction yielded the following findings. For the girls, the exclusively feminine girl was preferred most as a friend. With each addition of a masculine behavior, the friendship ratings became increasingly negative; however, all of the ratings fell on the positive side of the indifferent midpoint. The girls who engaged in two or more feminine behaviors were preferred as friends more than were the primarily masculine or exclusively masculine girls (all ps .05).

For the boys, the exclusively masculine girl was preferred most as a friend. With each addition of a feminine behavior, the friendship ratings became increasingly negative. The boys' ratings fell on the negative side of the indifferent midpoint once the target girl engaged in two feminine behaviors. The primarily and exclusively masculine girls were preferred as friends significantly more than the primarily and exclusively feminine girls; the girl who engaged in equal numbers of masculine and feminine behaviors was also preferred more than the exclusively feminine girl (all ps < .05).

Additional analyses showed that the girls were more interested than the boys in being friends with the girls who

engaged in two or more feminine behaviors (all ps < .0001). The sexes did not differ in their friendship ratings for the primarily and exclusively masculine girls.

Happiness.--A 2 (sex of child) x 5 (story-type) ANOVA revealed a main effect for story-type, $F(4,908)=2.41$, $p = .0479$ (Table 2). A Newman-Keuls test indicated that the primarily masculine girl was considered less happy than the the girl who was primarily feminine and the girl who was equally masculine and feminine (both ps < .05). None of the other comparisons were significant. In general, the children appeared to judge the target children as being happy "most of the time."

Imitation.--A 2 (sex of child) x 5 (story-type) ANOVA revealed a main effect for grade ($F[3,217]=9.64$, $p < .0001$), a sex x story-type interaction ($F[4,868]=30.86$, $p < .0001$), and a sex x grade x story-type interaction, $F(12,868)=2.19$, $p=.0106$ (Table 2). Duncan's multiple range test showed that the grade 3 children had more favorable imitation ratings (mean, 2.64) than the children in grades 4 (mean, 3.13), 5 (mean, 3.50), and 6 (mean, 3.54), respectively (all ps .01). The ratings of the grade 4 and 5 children differed as well ($p < .05$).

Because the sex x story-type interaction was more powerful than the three-way interaction involving grade, it will be described first. Simple effects analysis showed that the girls were most interested in emulating the behavior of the exclusively feminine girl. With each addition of a

masculine behavior, the ratings became increasingly less favorable. The girls' ratings fell on the negative side of the indifferent midpoint once the target child manifested more masculine than feminine behaviors. There was more interest in imitating the behavior of the girls with two or more feminine behaviors than the exclusively masculine girl (all $\underline{p}$s $< .01$); in addition, there was more interest in imitating the exclusively feminine girl than the primarily masculine girl ($\underline{p} < .01$).

The boys were most interested in emulating the behavior of the exclusively masculine girl, and, with each addition of a feminine behavior, the ratings became increasingly less favorable; in fact, the only rating that fell on the positive side of the indifferent midpoint was for the exclusively masculine girl. Three of the four adjacent means differed significantly from each other (all $\underline{p}$s $< .01$).

Additional analyses showed that the girls were more interested than the boys in emulating the behavior of the primarily and exclusively feminine girls (both $\underline{p}$s $< .0001$) and less interested in emulating the behavior of the exclusively masculine girl ($\underline{p} < .0011$).

The three-way interaction appeared to qualify the above interaction in the following ways. Girls in grades 5 and 6 were less interested than the girls in grades 3 and 4 in emulating the behavior of the girls with two or more feminine behaviors. In fact, girls in grades 5 and 6 did not differ in their imitation ratings as a function of story-type; on

average, their ratings fell on the negative side of the indifferent midpoint. The boys' imitation ratings were much less affected by grade though the grade 6 boys were less interested than the boys in grades 3-5 in emulating the behavior of the exclusively masculine girl.

Discussion

The results of Experiment 2 were similar to the results of Experiment 1 in a number of ways, though there were differences as well. With regard to friendship, the girls' showed the most interest in being friends with the exclusively feminine girl, and, with each addition of a masculine behavior, the ratings became less and less favorable. In comparison to the boys' ratings in Experiment 1, the girls' friendship ratings were less negatively affected by the presence of cross-gender behavior; in fact, all of the girls' ratings fell on the positive side of the indifferent midpoint. This finding is consistent with the empirical literature that for many years has suggested a greater tolerance for cross-gender behavior in girls than in boys (e.g., Brown, 1956; Green, Williams, & Harper, 1980). Nevertheless, it is of interest to note that the girls who were primarily or exclusively feminine were judged more favorably than were the more masculine girls.

The boys' friendship ratings yielded a reversed pattern, in that the exclusively masculine girl was preferred most and the exclusively feminine girl was preferred least as a friend. In comparison to the girls' ratings in Experiment 1,

the boys in the present experiment were more negatively influenced by an opposite sex peer engaging in sex-typical behavior. Thus, it appears that boys are more sensitive than girls to variations in sex-typed behavior in both boys and girls.

As in Experiment 1, the happiness ratings yielded less pronounced differences than the friendship ratings. Moreover, the pattern was less clear, in that it was only the primarily masculine girl who was considered less happy than the other girls.

In general, the imitation ratings in Experiment 2 paralleled the ratings found in Experiment 1, though in the present experiment grade level influenced the ratings to some extent, more so for the girls than for the boys. It is probably the case that at least some of the sex-typed behaviors that were employed (e.g., the toys) bordered on being age-inappropriate for the older children, thus accounting at least in part for the indifferent nature of the imitation ratings, especially those made by the girls.

On the whole, the results for the first two experiments indicate that variations in sex-typed behavior influence friendship ratings by same-age peers, with boys' ratings more profoundly affected than girls' ratings. Both studies also demonstrate that children are sensitive to degrees of "gender role deviance," and not simply to absolute expressions of cross-gender behavior.

As we attempted to compare these data with the previous

empirical literature, we discovered an interesting "gap." The naturalistic studies referred to earlier have been restricted to children of preschool age, probably because of the amenability to carrying out such a methodology in the nursery school environment. In contrast, the analogue studies have almost invariably employed children in grade 3 or above, probably because such studies have required that children be able to read. Thus, there appear to be little empirical data regarding peer appraisals of sex-typed behavior in the first few years of elementary school.

An exception to this is the study by Carter and McCloskey (1984), who interviewed 80 children in kindergarten, and grades 2, 4, and 6. Children were first asked to generate examples of sex-typed behavior in each of four areas (toys, activities, friendship, and traits). Then, they were asked how they would respond to a child who engaged in each of these cross-gender behaviors. Carter and McCloskey found that about half of the children in kindergarten and grade 2 were unable to generate examples of sex-typed traits; however, for the other sex-typed behaviors, sufficient numbers of children were able to provide appropriate illustrations. Compared to children in grades 4 and 6, the two younger age groups generally showed greater tolerance for a peer who engaged in cross-gender behavior in the areas of toys, activities, and friends. On average, their ratings fell between indifference (e.g., "I wouldn't do anything") and active avoidance (e.g., "I wouldn't go

anywhere near him"). Carter and McCloskey also found a tendency for the younger children to indicate a greater willingness than the older children to play with a child who engaged in cross-gender behavior.

Experiment 3 was designed to examine further young childrens' appraisals of sex-typed behavior in their peers. Because children in the first years of elementary school vary in their ability to read, we developed a non-verbal assessment technique that was similar in form to the verbal technique employed in Experiments 1 and 2.

Experiment 3[1]

Method

Subjects

A total of 33 boys and 33 girls in kindergarten, grade 1, and grade 2 participated in the study. All of the chidren attended a public school in a suburb of Toronto. Parent permission forms were distributed to a total of 122 children and reminder letters were given to those children who had not returned a permission form within two weeks. Of these, 78 parents (64%) gave approval for their child to participate, 19 parents (16%) refused to allow their child to participate, and 25 parents (20%) did not return the form. The percentage of parents who gave approval did not differ significantly by grade.[2]

Procedure and Task

Children were tested individually by a female experimenter in an empty room in the school. Each child was

read three stories about a same-age boy in which the ratio of masculine to feminine behaviors varied: 4:0, 2:2, 0:4. For the 2:2 story, two exemplars were employed--in one story, the feminine behaviors were the dress-up clothes and the toy, whereas in the other story the feminine behaviors were the peers and the TV show. Clinical experience suggested that the former constituted the two most extreme feminine behaviors (of the four possible) whereas the latter constituted the two least extreme feminine behaviors (of the four possible).

Each story was mounted on 18" x 24" bristle board and accompanied by chromatic drawings of the sex-typed behaviors. After each story was read, a manipulation check was performed to assess whether the child had remembered its content. The manipulation check questions were mounted on a second bristle board. The questions were asked in a forced-choice manner, and the child was asked to point to the chromatic drawing that reflected the behavior of the child in the story. The children were then asked the same three questions that were employed in Experiments 1 and 2. For each question, the five point multiple choice format was represented by vertical bars that varied linearly in height (range, 3.6" x .5" to 11.5" x 0.5"). The tallest bar reflected the most positive rating; the shortest bar reflected the most negative rating. The children answered the questions by placing a small round yellow sticker on the appropriate bar.

Prior to being read the stories, the meaning of each bar

was explained in order to ensure that the children understood the concept of seriation. During this phase, all bars were pointed to, thus ruling out subsequent responses as being due to experience with one bar and not another.

Results

Inspection of the responses to the manipulation check questions indicated that 97% were answered correctly. No child had more than one incorrect answer and thus no data were lost.

Preliminary analyses indicated that grade and exemplar did not influence the results, so the data were collapsed across these two between subject factors.

Friendship.--The childrens' friendship ratings as a function of sex of child and story-type may be found in Table 3. A 2 (sex of child) x 3 (story-type) ANOVA revealed only a main effect for sex, $F(1,64)=10.38$, $p = .002$. The boys were more interested than the girls in being friends with the boys in the story, regardless of his pattern of sex-typed behavior. On average, both sexes expressed interest in being friends with the target child.

Happiness.--A 2 (sex of child) x 3 (story-type) ANOVA revealed no significant main effects or interaction (Table 3). On average, both sexes rated the boys as being happy most of the time.

Imitation.--A 2 (sex of child) x 3 (story-type) ANOVA revealed a significant sex x story-type interaction, $F(2,124)=5.81$, $p = .003$ (Table 3). Simple effects analysis

showed that the boys were more interested in emulating the behavior of the exclusively masculine boy than the behavior of the exclusively feminine boy ($p < .05$). The boys' rating for the mixed story fell between the ratings for the exclusively masculine and exclusively feminine story, respectively (both $ps > .05$). On average, ratings for all three stories fell on the positive side of the indifferent midpoint. For the girls, there was a trend for their imitation ratings to differ from one another ($p < .10$). On average, their ratings showed increasing interest in emulating the target child as his behavior became more feminine.

Additional analyses showed that the boys showed a greater interest than the girls in emulating the behavior of the exclusively masculine boy ($p < .05$) whereas the converse was true for the behavior of the exclusively feminine boy ($p < .10$).

Discussion

The friendship ratings by the boys in Experiment 3 differed notably from the friendship ratings by the boys in Experiment 1. Although the boys showed a greater interest than the girls in being friends with the target child, their ratings were not affected by the target child's pattern of sex-typed behavior. Both sexes provided, on average, favorable ratings of friendship.

This finding seems surprising for at least two reasons. First, children in the age range studied manifest, on

average, sex-typed behavioral preferences (and our imitation rating generally confirmed this). Second, studies of preschoolers report that children respond negatively to the expression of cross-gender behavior in boys. Thus, it is puzzling that cross-gender behavior did not influence boys' friendship ratings.

From the standpoint of methodology, at least three factors should be considered. First, one could argue that the children did not correctly assimilate the information about the children engaged in cross-gender behavior (cf. Cordua, McGraw, & Drabman, 1979). This appears unlikely, given that almost all of the manipulation check questions were answered correctly and the imitation ratings were affected by the sex-typed behavior of the target child. A second possibility is that the children did not understand how to use the vertical bars, and thus manifested a response set; however, the data do not really support this explanation. In addition, the childrens' responses to the initial instructions clearly suggested their understanding of the concept of seriation. The third possibility is that the chromatic illustrations were so appealing that the children were reluctant to make negative judgments about the target child. We are currently attempting to evaluate this hypothesis by testing grade 3 children in the current format vs. the procedure employed in the first two experiments.[3]

Assuming that methodological factors do not tell the whole story, what are the implications of the present study's

findings for understanding the role of peers in gender role regulation? The argument that will be advanced here is that we have probably overestimated the prevalence (and possibly the salience) of negative reactions to cross-gender behavior in the preschool and early elementary school years. In the study by Fagot (1977), for example, the most predominant response to cross-sex behavior was "neutral," not negative. Similarly, the average reaction to hypothetical cross-gender behavior in the study by Carter and McCloskey (1984) was close to their indifferent midpoint. Data from Green's (1976) study of 55 extremely feminine boys also suggest that negative reactions by same-sex peers is not particularly salient in this age range. Maternal ratings of same-sex peer group relations indicated that 14% of the feminine boys were leaders (mean age, 5.8 years), 29% were good mixers (mean age, 6.8 years), 38% were voluntary loners (mean age, 6.6 years), and 18% were rejected (mean age, 8.8 years). Analysis of variance and post-hoc tests show that the rejected boys were significantly older than the other three groups, who do not differ in age from one another. Thus, even extremely feminine boys do not appear to be rejected by their male peers until around grade 3, though some may "voluntarily" exclude themselves earlier than this, perhaps because they anticipate rejection (cf. Fagot, 1977).[4]

Given these data, it is possible that factors other than negative reactions to cross-gender behavior are more salient

in regulating gender role behavior during the preschool and early elementary school years. These might include young childrens' belief that engaging in cross-gender behavior will transform one's gender identity (Kohlberg, 1966), that engaging in cross-gender behavior is morally wrong (Stoddart & Turiel, 1984), or the simple possibility that same-sex affiliation preference in its own right provides sufficient regulation of gender role behavior.

Even if these speculations are correct, the question remains as to what accounts for the apparent increase in negative reactions to cross-gender behavior by middle childhood. Paradoxically, children at this age are becoming more flexible in their cognitive understanding of gender role behavior, both in terms of realizing its social (arbitrary) components (Carter & Patterson, 1982; Stoddart & Turiel, 1984) and in allowing that both sexes may engage in sex-typical behavior (e.g., Urberg, 1982). These findings point to the separation of cognitive and affective components of sex-typing, given that most children do not prefer to deviate from sex-typical patterns of behavior, even though they acknowledge in the abstract the permissibility of so doing. The mechanism that might account for the developmental shift that seems present in our frienship ratings is that around the age of 8 children begin to recognize that other persons manifest stable personality traits and abilities (see Barenboim, 1981; Rholes & Ruble, 1984). Accordingly, the sex-typed characteristics of peers may then take on greater

significance, and moves children beyond the simple preference for same-sex peers, such as was noted in Experiment 3; however, given that the sexes appear to differ in their degree of reaction to cross-gender behavior suggests that both cognitive and affective factors are involved. It would appear, therefore, that more data are needed before this particular story of sex-typing can be completed.

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Table 1
Peer Ratings as a Function of Sex of Child and Story Type (Experiment 1)

	Masculine to Feminine Ratio									
	4:0		3:1		2:2		1:3		0:4	
Friendship	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
Boys	1.58	0.94	1.90	1.07	2.48	1.22	3.18	1.37	3.50	1.43
Girls	2.86	1.22	2.71	1.30	2.55	1.20	2.64	1.25	2.43	1.33
Happiness										
Boys	1.88	0.79	1.95	0.69	2.13	0.74	2.20	0.75	2.08	0.85
Girls	2.03	0.70	2.05	0.71	2.18	0.73	2.28	0.72	2.14	0.75
Imitation										
Boys	2.50	1.28	3.19	1.37	3.48	1.35	3.89	1.17	4.33	1.18
Girls	3.80	1.21	3.16	1.26	2.80	1.24	2.59	1.18	2.50	1.37

Note.--Target child was a boy in each story. For each measure, response scale ranges from 1-5.

Table 2

eer Ratings as a Function of Sex of Child and Story Type (Experiment 2)

	Feminine to Masculine Ratio									
	4:0		3:1		2:2		1:3		0:4	
Friendship	X	SD	X	SD	X	SD	X	SD	X	SD
Boys	3.25	1.38	3.23	1.38	3.03	1.32	2.80	1.35	2.68	1.38
Girls	2.13	1.25	2.25	1.15	2.36	1.06	2.62	1.21	2.70	1.27
Happiness										
Boys	2.08	0.79	2.10	0.83	2.06	0.81	2.13	0.80	2.02	0.68
Girls	2.04	0.79	1.96	0.74	2.09	0.73	2.22	0.73	2.11	0.75
Imitation										
Boys	4.17	1.14	3.70	1.35	3.29	1.39	3.14	1.36	2.67	1.41
Girls	2.74	1.37	2.90	1.26	2.96	1.27	3.15	1.27	3.33	1.26

te.--Target child was a girl in each story. For each measure, response scale ranges from 1-5.

Table 3

'eer Ratings as a Function of Sex of Child and Story Type (Experiment 3)

	Masculine to Feminine Ratio					
	4:0		2:2		0:4	
Friendship	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
Boys	4.64	0.69	4.48	0.75	4.60	0.65
Girls	3.91	1.31	3.79	1.39	4.00	1.29
Happiness						
Boys	4.43	0.75	4.33	0.99	4.15	1.18
Girls	4.09	1.13	4.15	1.21	4.24	1.12
Imitation						
Boys	4.09	1.18	3.73	1.53	3.30	1.38
Girls	3.33	1.53	3.88	1.29	3.90	1.28

te.--Target child was a boy in each story. For each measure, response scale ranges from 1-5.

Footnotes

[1]This experiment was carried out by Stern (1985).

[2]Twelve children whose parents provided permission were not tested due to time constraints.

[3]As Exeriment 3 progressed, it was apparent that the friendship ratings were differing dramatically from Experiments 1 and 2. Accordingly, we considered that the mode of presentation was involved. Six grade 2 students were given the task in oral form, but it was clear that this was not affecting the responses. Their data were retained.

[4]We would like to thank Richard Green, M.D., for providing the raw data on which this analysis was based.